Minutes of the Meeting
Q1 2021 RSSC: Meeting #52

Meeting date: 11/03/2021
Meeting time: 09:30 a.m.
Meeting location: IESO Hosted WebEx

Chair/Sponsor: Scott Berry/Tam Wagner
Scribe: Sean Lagan

Invitees	**Representing**	**Attendance Status** **Attended, Regrets, Teleconference**
Payam Farahbakhsh	Hydro One	Teleconference - WebEx
Mike Bethuling	Hydro One	Teleconference - WebEx
Amelie Morissette	Evolugen	Teleconference - WebEx
David Kiguel	Independent	Teleconference - WebEx
Des Ngunangwa	Bruce Power	Teleconference - WebEx
Joel Charlebois	AESI	Teleconference - WebEx
Juri Baroskov	Capital Power	Teleconference - WebEx
Laurie Reid	OEB	Teleconference - WebEx
Hassan Vahed Kalanesh	Hydro One	Teleconference - WebEx
Helen Lainis	IESO	Teleconference - WebEx
Rob Antonishen	IESO	Teleconference - WebEx
Steve Cannon	Bruce Power	Teleconference - WebEx
Jacinda Belisle	Evolugen	Teleconference - WebEx
Dhvani Shah	Hydro One	Teleconference - WebEx
Kyle Smith	Northland Power	Teleconference - WebEx

Invitees	Representing	Attendance Status Attended, Regrets, Teleconference
Shahid Khan	Northland Power	Teleconference - WebEx
Paul Malozewski	Hydro One	Teleconference - WebEx
Sheraz Majid	Hydro One	Teleconference - WebEx
Yamilet Vargas Ribot	FPL	Teleconference - WebEx
Chris Moir	OPG	Teleconference - WebEx
Andrew Burmaster	Evolugen	Teleconference - WebEx
Andrew Punkari	Evolugen	Teleconference - WebEx
Catherine Either	OEB	Teleconference - WebEx
Sylvian Moore	Boralex	Teleconference - WebEx
Mike Cooke	OPG	Teleconference - WebEx
Kevin Wozniak	Hydro One	Teleconference - WebEx
Christian Shirabad	Atura	Teleconference - WebEx
Ejiro Winthorpe	IESO	Teleconference - WebEx
Michael Jacobs	Pattern Energy	Teleconference - WebEx
Abbas Munir	Bruce Power	Teleconference - WebEx

Agenda Item 1: Welcome and Introductions

Scott Berry kicked off the 51 RSSC meeting at 9:30 am welcoming participants, and noting that for the foreseeable future RSSC meetings will be held in the teleconference format.
Introductions were complete. Anyone who attended by phone rather than logging into the Webex was asked to send an email to the scribe (sean.lagan@ieso.ca)
Scott Berry completed the introductions with a safety moment (smoke detector batteries)

Agenda Item 2: Administrative Items

Scott Berry reviewed the Administrative Items.

The Meeting Agenda for meeting 52 (Q1 2021) was reviewed and adopted as constructed
The Meeting Minutes of the previous meeting were reviewed. Some minor changes were provided in advance of the meeting and incorporated into the draft. The minutes were accepted as drafted.
The IESO will post all 2020 materials- they are in the process of revising the 2020 documents for AODA compliance. They will be posted in the near future.
Scott Berry proposed moving towards meeting every 4 months instead of 3, noting that the meetings should still be aligned with the CIP Task Force meetings.
Rob Antonishen asked if we would give consideration to moving to a teleconference long-term?
L. Reid noted that we could move to a hybrid format where participants could have the option of attending in person, or joining remotely.
Scott Berry took an Action Item (Q1-2021-01) to prepare a formal proposal from 4 meetings to 3 meetings a year. This will be distributed prior to the Q2 meeting, where it will be voted on.
Mike Cooke noted a possible gap between meetings that could result in a missed opportunity for Market Participants to identify and discuss market rule changes. The extra month provides another window for these things to pass through without discussion or awareness for Market Participants.
Scott Berry noted the IESO will look at the impact on moving to this. We will ensure this information is available with the proposal.

Action Item Summary

No open Action Items for this meeting.

ID	Date	Action	Status	Comments
	N/A			
	N/A			

Agenda Item 3: CIP Standards Development Update

Rob Antonishen Provided the CIP Standards Development Update.

<u>Coordination Between CIP SDTs</u>

- In order to prevent confusion due to the large number of CIP Standards being changed placeholder numbering is being introduced
- BCSI Access Management SDT will be posting proposed changes as CIP-004-X and CIP-011-X
- CIP Modifications - Virtualization SDT will be posting changes in the future as CIP-004-Y and CIP-011-Y
- Both SDTs are anticipated to be completed by end of 2021

- It is expected that the BCSI effort will be completed first and the Virtualization SDT will need to make conforming changes

2016-02 SDT CIP Modifications - Virtualization Update

CIP-002-6 included changes for TO Control Centers. Petition for approval was submitted to FERC on June 12, 2020. The 'Notice of Withdrawal' was submitted Feb 16, 2021.

".. In light of recent cybersecurity events (SolarWinds) and the evolving threat landscape, NERC asserts that additional caution is warranted regarding any criteria that may permit more entities to categorize BES Cyber Systems as low impact, such as the revisions proposed in CIP-002-6, and recommends further study…"

The existing Ballot for CIP-002-7 will proceed as posted. On the next ballot of CIP-002-7, the previous TOCC changes that were proposed under CIP-002-6 will be reverted back to CIP-002-5.1a and the virtualization changes will be reapplied. CIP-002-Y numbering sequence will likely be used in the future. Further study being done by NERC with entities within the WECC and TRO Regions. Much of the CIP-002 expertise has left the original 2016-02 SDT, it is likely TOCC changes will be proposed by a new SDT. The new SDT will likely be working under the existing or a modified SAR for Project 2016-02.

2021 Schedule for Project 2016-02

- Initial posting Jan 22, 2021 of proposed changes to CIP-002 to CIP-011 as well as CIP-013. CIP-012 minor conforming changes will be left for the future Project 2020-04 SDT CIP-012 Modifications
- Initial ballots for the proposed standards due March 22, 2021
- Planned subsequent ballots May 11-June 24 and Aug 8-Sept 16
- Planned final ballot Oct 19-28, 2021
- Planned board adoption on Nov 4, 2021
- Webinars outlining the proposed changes given on Feb 23 and Mar 3:
- "High Level of Change" to Definitions, CIP-005-7 and CIP-010-5
- "Moderate Level of Change" to CIP-002-7, CIP-004-7, CIP-006-7, CIP-007-7, CIP-011
- "Minor Level of Change" to CIP-003-9, CIP-008-7, CIP-009-7, CIP-013-3

The proposed virtualization related changes were discussed at Mar 10 IESO CIP Standards Sub Committee Meeting:

Low Impact BES Cyber Systems that wish to use virtualization may be impacted by off-site use of Shared Cyber Infrastructure (CIP-003-9) No backwards compatibility for V5TAG changes requested to Interactive Remote Access (IRA) and serial connectivity in proposed changes to CIP-005 Requirements R2 and R3

In particular, Medium Impact BES Cyber Systems without External Routable Connectivity that have serial connection based IRA impacted with additional proposed changes to CIP-004 Requirements R2 to R5.

2019-02 SDT BCSI Access Management ("BCSI in the Cloud")

The Project 2019-02 SDT is scheduled to post Draft 3 during the week of March 22.

Draft 3 has been simplified by removing the proposed highly prescriptive technical requirements and incorporating the comments received on Draft 2. It is anticipated that the 2019-02 SDT will be completed it's work prior the end of 2021 and likely ahead of the Project 2016-02 SDT.

2019-03 SDT Cyber Security Supply Chain Risks

NERC submitted its petition to FERC for approval of proposed Reliability Standards CIP-013-2, CIP-005-7, and CIP-010-4 addressing supply chain cybersecurity risk management on Dec 14, 2020.
Laurie Reid asked if Ontario industry personnel have any lingering concerns on these (in terms of content, technical viability, or cost)?
Rob Antonishen responded that has been no significant feedback through CFSC group. The proposed changes are relativley minor in nature for most people (assuming you have initiated a supply chain risk mitigation program).
Payam Farahbakhsh commented that the general sense from idustry and the Hydro One posisition is that thiis is a step in the right direction. Overall the feeling is there will not be a lot of resistance but they will ensure they provide all concerns to the drafting team (though he does not expect any significant concerns).

CIP-008-6 Proposed Implementation Guidance
The Project 2018-02 SDT - Modifications to CIP-008 Cyber Security Incident Reporting produced proposed implementation guidance. The initial draft was rejected for ERO endorsement. Industry comments where incorporated into a second draft which was resubmitted. In the the interim, NERC produced a new policy on Implementation Guidance. Draft 2 was also rejected for ERO endorsement The 2018-02 SDT is awaiting further direction on the additional changes need (mostly minor in nature).

Rob Antonishen highlighted the importance of this Implementation Guidance, and took Action Item (Q1-2021-02) to incorporate a review of the content at the Q2 RSSC Meeting. Market Participants will be encouraged to invite their organization CIP Security members to attend.

Agenda Item 4: O&P Standards Development

Helen Lainis delivered the O&P Standards Development update.
Currently there are two standards under development that will be of interest to Ontario Market Participants.

NERC Project 2019-06 Cold Weather
The project includes revisions to three standards;

- EOP-011-2
- IRO-010-4
- TOP-003-5

The revisions include expanding applicability of the GO to have a cold weather preparedness plan that includes freeze protection measures, maintenance, awareness of unit capabilities and training. Also, included is the need for the RC and the TOP to have a data specifications pertaining to the design and historical cold weather performance of the units in their RC/TOP area. With the recent weather related events in Texas there has been increased urgency and importance of this project

with the expectations that timelines will be expediated. The IESO has supported the proposed revisions.

Project 2021-01 Modifications to MOD-025 and PRC-019

Informal Comment Period Open through April 2, 2021. The SAR proposes to revise MOD-025-2 to address issues regarding verification and data reporting of generator active and reactive power capability. The implementation of the standard has rarely produced data that is suitable for planning models (i.e., the stated purpose of the standard). The current MOD-025-2 verification testing activities require significant time, expertise, and coordination; however, they do not result in data that should be used by planners for modeling purposes. The SAR aims to retain testing activities are useful and focus on more effective means of collecting useful data for planning models. PRC-019-2 addresses the reliability issue of mis-coordination between generator capability, control systems, and protection functions. However, PRC-019-2 was developed with a bias toward synchronous generation and does not sufficiently outline the requirements for all generation resource types. The SAR proposes to revise the standard to be inclusive of all types of generation resources. It will also determine how to address the applicable scope of Transmission-connected Dynamic Reactive Resources.

Agenda Item 5: NERC Standards Implementation Roadmap

Hamad Shahbaz delivered the NERC Standards Implementation Roadmap

The roadmap is posted online for participants to review.

Amelie Morissette noted that there is a current link online pointing to 2018. Sean Lagan took an Action Item (Q1-2021-03) to ensure the most recent version of the milestone document is uploaded online. *Amelie Morissette* also noted that it would be helpful applicable entities could be incorporated into the milestone document. *Sean Lagan* noted IESO Compliance Assurance will try to make that modification but it may not be completed until a future posting.
Amelie Morissette asked if PRC-002 is only applicable only to BES facilities?
Scott Berry responded that Market Participants would be informed if their facility is BES. It is then the responsibility of the Market Participant to use the attachment within Attachment 1 of the standard to determine applicability for your BES fault recorders and SCRS. The IESO will notify you if you need to have DDR's in place.
To be clear, PRC-002 is applicable for BES facilities. From a DDR perspective, those required in install equipment have been informed. If you have not received that notification, then you do not need to install. Regarding obligations for SCRs and fault recorders for Generator Owners, Hydro One will notify the Market Participant if they are required to install.
Sheraz Majid from Hydro One indicated that as per attachment 1, H1 did initial evaluation and did issue letters to all Market Participants. The evaluation needs to be complete every 5 years, so H1 does plan to re-evaluate, and will re-issue as that deadline approaches.
Joel Charlebois noted the importance for Market Participants to ensure that their contact information for these distribution lists up to date. *Scott Berry* requested all Market Participants please also review

their contacts for Online IESO notifications. If there have been retirements or changes in staff recently where notifications are not getting to the right people, please get these lists up to date to avoid costly delays and rework.
Amelie Morissette noted it would be beneficial for market participants if there was an update to the c "Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria" document. The document is a useful reference to confirm the applicability of some NERC standards but, it seems to be obsolete and additional precision could be provided to provide better guidance to Market Participants/BES facility. Helen Lainis indicated that Compliance Assurance can look at possible enhancements and will confirm the next lifecycle review date for the document (Q1-2021-04).
Amelie Morissette asked if there will be an extension for the Effective Date for PRC-027? *Kurtis Chong* responded that the initial extension was based on a FERC decision, and that the IESO will follow suit with the US. If there is more flexibility or extension provided we will communicate this as the situation evolves.
Mike Cooke asked if the revisions to EOP-011 will apply to generators?
Helen Lainis responded that the proposed revisions are resulting from impacts in the south central united states. One is to EOP-011. They want to add requirements that have applicability to Generator owner including maintenance, training, and freeze protection. This work is likely already being done in Ontario.
Kurtis Chong- noted the vast number of standard updates in Q2 and enquired what the reason behind this was?
Sean Lagan responded the majority of these changes are administrative changes, conforming changes, or were removing duplicated requirement (stemming from SER), or getting rid of Load Servicing Entity.
Constantine Chitescu. commented regarding the extensions being granted in the United States, in Canada, we should aim to keep in synch with the united states, but there may also be a need to look for longer extensions. This is because in cases where the United States are more aggressive on their target date, we likely won't see the market (services and vendors) open as quickly as what is available to them. We may need longer extensions to account for slower vaccination rates etc.
Scott Berry asked if this something we should extend across the Province or should we proceed with the current process and leverage the exemption and forbearance processes.
Dave Kwan noted it would be preferable to have the extended implementation dates apply across the board. Forbearance is case by case for each MOP with extensive work to go through legal, it may be easier to update the implementation plan for everyone.
Kurtis Chong noted this point and indicated he will take this point back and discuss with IESO Management, and will notify Market Participants how to proceed.
Dave Kwan noted that with respect to PRC-027, the April 1, 2021 Effective Date will come quick, and if there is going to be an extension it will need to be communicated quickly.
Kurtis Chong responded that we (IESO) have already initiated discussion on it internally. IESO will take feedback from this meeting and will communicate that immediately.

Agenda Item 6: Lessons Learned

Hamad Shahbaz delivered the Lessons Learned published by NERC since the last RSSC meeting.

NERC posted two lessons learned since the last RSSC meeting.

- Transient Induced Misoperation: Approach I (Control Circuit Transient Misoperation of Microprocessor Relay)
- Transient Induced Misoperation: Approach II (Loss of Protection during Severe Lightning Event)

Kurtis Chong noted that these are highly technical lessons learned. Some expertise in protection systems engineering is required to jump into the technical details.

Agenda Item 7: MACD Update (Self Certifications/Covid 19 Update)

Nada Bojevski delivered the MACD Update on Self-Certifications

In 2020 MACD completed 25 Self-Certifications
24 of these Self-Certifications were submitted by Market Participants. (with one being retracted as the MP was Mothballed).
The Lessons Leaned from the Self-Certifications;
FAC-008-3 & Applicability- Some submissions did not include revenue metering current transformers (CT) with the primary connected in series with the facility.
Note NERC's comment on applicability:

> *If the primary winding of a CT, used for metering or not, is in series with the facility then the Standard applies to that CT. A manufacturer's rating of the primary winding's thermal limit will suffice.*

PRC-005-6 – Implementation
PRC-005-6 R3 is implemented in accordance with the Ontario Enforcement Dates for PRC-005-2(i) and PRC-005-6 Implementation Plans - For Existing and Newly Identified BES Elements document, available from:
Components with 6-calendar-year maximum maintenance interval;

- The 30% threshold was not met on April 1, 2018;
- The 60% threshold on April 1, 2020 - in focus for the 2021 CMP;
- If both thresholds are missed, it would constitute a long-lasting potential non-compliance.

Components with 12-calendar-year maximum maintenance interval

- The 30% threshold on April 1, 2020 - in focus for the 2021 CMP;
- MACD may conduct spot-checks to verify the compliance with the latest enforcement thresholds.

Nada provide a presentation on the 2021 CMP Document

- PRC-001
- PRC-004
- PRC-005
- FAC-003
- FAC-008
- CIP-002
- CIP-003
- CIP-013
- NPCC Dir 8
- NPCC Dir 11

Christian Dragnea provided an update on the recently issued 'Compliance and Enforcement Guidance' document.
This document compiles the requirements and rules that speak about the benefits of self reporting.
Note that 'Self-reporting' is not mandatory in Ontario, but it is recommended.
This guidance provides the key elements of what constitutes as a good 'self-report'.
The document provides methods and options for how to submit self report (MACD Inbox, RCT Tool), and highlights the importance of timeliness (As soon as possible once identified)
Additionally, Christian directed participants' attention to MACD website that has other statements of approach.

Chris Moir asked why for the year 2021 PRC-004 quarterly reporting, only one quarter was listed (Feb 2021) for 2021 historically we are used to seeing all quarters?
that the remainder of the schedule is available and it should be posted. *Nada Bojevski* took an Action Item (Q1-2021-05) is scheduled and should be posted.
Payam Farahbakhsh noted the same thing applies for FAC-003- the dates are not published. *Nada Bojevski* indicated MACD will ensure all available dates are posted.

Morgan Tam inquired if regarding CMP for 2021. Is there a timing for letters?
Nada Bojevski responded MACD was aiming for Q1, but most likely will be early Q2 (April).

Kurtis Chong noted that regarding oMOD-025 submissions, IESO Compliance Assurance will be issuing notifications to all Market Participants who have a single generator where MOD-025 is applicable. The implementation plan comes to an end at the end of this year. 100% compliance means completing their testing by the end of this year. Those notifications will be issued shortly. In addition to that, CA has worked with MACD to have Market Participants provide status updates on there (MOD and PRC) testing. To date, we have gotten very good results. IESO Compliance Assurance wanted to acknowledge the efforts made b MPs. *Kurtis* noted that these reports are making our job much easier. A lot of the issues being experienced in the united states that have resulted in the SAR for MOD-025 and PRC-019 have not been prevalent in Ontario, and this is largely due to the efforts of MPs.
Dave Kwan asked if the MOD-025 test is completed on December 31, does that still consider meeting their obligation?

Kurtis Chong responded that this is correct, but we are still trying to avoid a backlog for the PVM group at year end. If you do anticipate tests coming at year end, please contact our PVM team to notify.

Dave Kwan asked for MACD to clarify if the term being used "long lasting potential non-compliance" is that a term that is in market manual or just within the statement of approach?
Christian Dragnea responded that this is not a term you will find within Market Rules. What they are trying to communicate is if you are missing two out of three thresholds, it is an indicator of a poor compliance program, and potentially a lack of due diligence. It is intended to highlight the concern MACD would have with missing these thresholds. If you anticipate you cannot meet those thresholds, please communicate this to us (there are processes like the forbearance process) to assist in valid cases.

Agenda Item 8: Market Manual 11.5 Update

Sean Lagan delivered the MACD Update on Self-Certifications

Feedback has been collected from Baseline 45.0
Minor changes to provide clarity have been incorporated, and include;

- Authors removed the local definition of and references to "Dynamic Devices"
- Updated the text in various sections to specifically refer to synchronous condensers, energy storage devices and voltage compensating devices.
- Revised Section 1.3 to clarify the applicability of requirements to BES and non-BES facilities.
- Revised Section 3 for improved clarity and introduced references to two new workbook forms.
- Changed the title of the market manual to: "Model Validation of Generation and Energy Storage Facilities and other devices".
- Changes made to multiple sections of this manual to update procedural steps, and replace references from NPCC Directories 9 and 10 to applicable market rules requirements and the related NERC standards.
- Title changed to MM11.5 Model Validation of Generation and Energy Storage Facilities and other device

Agenda Item 9: OPSRP Update

Scott Berry Delivered the OPSRP Update in place of John Antonakos

Four "Table-top" Restoration Workshops have been scheduled, however due to COVID-19 these will be held remotely. The IESO Emergency Preparedness website lists dates and registration information. In the past we have tailored the workshops to the area we have delivered it. Due to some of the limitations with virtual delivery, the workshops will be the same (not region specific). It is strongly encouraged that Market Participants register and participant in these events.

The OPSRP is currently being reviewed to determine if any updates are required. John will report on periodic review at Q2 meeting.

Agenda Item 10: Roundtable

Participant lead discussions around how MP/organizations share the compliance responsibilities/obligations tasks between Operation team and Technical Service group

A participant lead discussion was held around how organizations share the compliance obligations within their organizations.

Michael Jacobs indicates that with Pattern, there is a large shared responsibility. The Compliance group develops guidelines and ensures organization knows all obligations from IESO/NERC. While the Technical service group maintains work orders, schedules dates , and responds to technical requests. Pattern has also formed strong relationships w/ IESO to get answers/directions on their expectations.

Kurtis Chong noted in cases where there is a shared responsibility, the IESO has had the most success when there is one overall group that holds the overall accountability for the completion of obligations

Mike Bethuling notes on the Operations side, there is one person who is responsible, and they will administer work requirements to the other groups performing tasks, are ensure they understand how they contribute to the overall success of the obligation.

Michael Jacobs added that Pattern has a single point of contact for communications. Everything goes through them and they have responsibility. Then there is in house management within organization for specific work items.

Kurtis Chong added that at IESO, one person is designated as the steward. There may be other teams that contribute and they are identified at the requirement level. Whenever there is confusion around the work, it will default to the steward to decision.

Q2 Roundtable Discussion - FAC-008 implementation

What tool is MP/organization's using for FAC-008? Is it an internal spreadsheet developed specifically for the purpose or an on-the-shelf tool available as per the one offered by Omicron or other tool available on the market developed by a third-party to address this FAC-008 standard?

Future Meeting Dates:

The 2021 RSSC Meeting Dates are;

Q2- June 10
Q3- Sept 23
Q4- Dec 9

The meeting is adjourned at 11:41 am

Action Items at Completion of 2021 RSSC Q1 Meeting

ID	Date	Asignee	Action	Status	Comments
Q1-2021-01	March 11, 2021	Scott Berry	S. Berry prepare a formal proposal for RSSC committee to move from 4 meetings to 3 meetings per year. Scott will assess impact of reduced meetings on communication of changes to IESO document/manuals.	New	
Q1-2021-02	March 11, 2021	Rob Antonishen	During Q1 meeting, Rob Antonishen highlted NERC Implimentation Guidance on CIP-008-6. Rob indicated there would be a value add to have IESO present on the guidance at the Q2 meeting with MP having their CIP Security members present for questions	New	
Q1-2021-03	March 11, 2021	Sean Lagan	S. Lagan to ensure the most recent version of the milestone document is uploaded online.	New	
Q1-2021-04	March 11, 2021	Helen Lainis	Helen Lainis to an Action Item to look at possible enhancements to the 'Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria' and will confirm the next lifecycle review date for the document (Q1-2021-04).	New	
		Nada Bojevski	Meeting participants noted that for the year 2021 PRC-004 and FAC-003 quarterly reporting, only one quarter was listed (Feb 2021) for the year. Historically, all quarters are posted. N. Bojevski noted this information is available, and took an action item to ensure the online material is updated.	New	